Office of Solid Waste



Environmental Fact Sheet

EPA Guideline for Purchasing Re-Refined Lubricating Oil

Re-refined oils are used lubricating oils that have been cleaned through a refining process. Like virgin oils, they are mixed with an appropriate package of additives to produce a desired performance.

Performance of Re-refined Oil

EPA reviewed studies of re-refined oil conducted by the National Bureau of Standards, the Army, the Department of Energy, and others. These studies concluded that re-refined oils perform as well as virgin oils. The National Bureau of Standards concluded that laboratory and field testing of re-refined oils is sufficient to demonstrate that they can meet the prescribed test

limits, are substantially equivalent to virgin oils, and, for some parameters, perform better than virgin oils.

Procurement Guideline

To increase the use of re-refined oil within both government and private sectors, on June 30, 1988, EPA issued a guideline for purchasing lubricating oils containing re-refined oil. All federal agencies and all state and local government agencies and contractors that use federal funds to purchase such products are required to implement a preference program favoring the purchase of re-refined oil to the maximum extent practicable.

Procuring agents should not require lubricating oils

containing re-refined oil to meet any performance standard higher than that required of virgin lubricating oils.

API Specifications

In general, engine oils are purchased using military specifications or the engine service classification system developed by the American Petroleum Institute (API). The API service level is specified in the owner's manual of a vehicle. It generally consists of two letters, such as SF or SG for gasoline engines or CC, CD, CD-II, or CE for diesel engines. These letters are a shorthand describing the required properties of the engine lubricating oil suitable for a particular vehicle. Oils meeting the API levels generally are packaged in containers bearing the API-licensed logo. The logo consists of two concentric circles with the API service level identified in the space between the circles.

Military Specifications

To meet the military specifications or the API service levels, lubricating oil, whether virgin or rerefined, must pass certain testing programs. Oil meeting the military specifications also meets the API service levels, but not viceversa. A Qualified Products List of oil meeting the military specifications is maintained by the U.S. Army's Research and Development Center at Fort Belvoir, VA.

Testing for meeting the military specifications is more extensive - and therefore more expensive - than testing for meeting the API service level. Re-refiners generally are small businesses that have had difficulty in raising the capital needed to undergo testing to meet the military specifications. As a result, several re-refined oils meeting the API levels are available, and one re-refined oil has qualified as meeting the military specifications.

Methods of Purchasing Re-refined Oil

Re-refined oil products can be purchased through

sealed bidding or negotiation for supply of the products. In addition, federal agencies could consider closed-loop and quasi-closedloop arrangements.

In a closed-loop arrangement, the re-refiner contracts to remove the agency's used oil, re-refine it, and return it for reuse. In a quasi-closed-loop arrangement, the re-refiner contracts to remove the agency's used oil for re-refining and to supply re-refined oil; the oil supplied may or may not have been produced from the agency's used oil.

Product Availability

There are five North American re-refiners producing lubricating oils addressed by the EPA guideline. Depending on the company, re-refined oil products are available nationally or in large geographic segments of the United States.

Recommended Rerefined Oil Preference

EPA recommends that procuring agencies set a minimum re-refined oil content standard for purchasing engine lubricating oils, hydraulic fluids, and gear oils at 25 percent of the base stock.

Further Information

For further information, including copies of the guideline and a list of rerefiners and their products, please contact EPA's procurement guidelines hotline at (703) 941-4452.

